
CANCER FACTS

National Cancer Institute • National Institutes of Health

Questions and Answers About Cigarette Smoking and Cancer

Tobacco use, particularly cigarette smoking, is the single most preventable cause of death in the United States. Cigarette smoking alone is directly responsible for at least one-third of all cancer deaths annually in the United States, and contributes to the development of low birth weight babies and cardiovascular disease. Quitting smoking can significantly reduce a person's risk of developing heart disease and diseases of the lung, and can limit adverse health effects on unborn children.

1. What are the effects of cigarette smoking on cancer rates?

Cigarette smoking is the most significant cause of lung cancer and the leading cause of lung cancer death in both men and women. Smoking is also responsible for most cancers of the larynx, oral cavity, and esophagus. In addition, it is highly associated with the development of, and deaths from, bladder, kidney, pancreatic, and cervical cancers.

2. Are there any health risks for nonsmokers?

The health risks with cigarette smoking are not limited to smokers—exposure to environmental tobacco smoke (ETS) significantly increases a nonsmoker's risk of developing lung cancer. (ETS is the smoke that nonsmokers are exposed to when they share air space with someone who is smoking.) The U.S. Environmental Protection Agency (EPA) released a risk assessment report in December 1992 in which ETS was classified as a Group A (known human) carcinogen—a category reserved for only the most dangerous cancer-causing agents. The EPA report estimates that ETS is responsible for lung cancers in several thousand nonsmokers each year, and ETS exposure is also linked to severe respiratory problems in infants and young children. More recently, the California Environmental Protection Agency issued a comprehensive report on the health effects of ETS and concluded that ETS is directly related to coronary heart disease.

3. What harmful chemicals are found in cigarettes?

Tobacco smoke contains thousands of chemical agents, including 60 substances that are known to cause cancer (carcinogens).^{*} During smoking, nicotine is absorbed quickly into

^{*} National Cancer Institute. *Cancer Rates and Risks*. 4th edition. National Institutes of Health, 1996. p. 70.

the bloodstream and travels to the brain, causing an addictive effect. The Surgeon General Reports noted the following conclusions about nicotine: cigarettes and other forms of tobacco are addicting, and the aspects that determine tobacco addiction are similar to those that determine heroin and cocaine addiction.

4. How does exposure affect the cigarette smoker?

The risk of developing lung and other smoking-associated cancers, as well as noncancerous diseases, is related to total lifetime exposure to cigarette smoke. This includes the number of cigarettes a person smokes each day, the age at which smoking began, the number of years a person has smoked, and ETS exposure.

5. What additional resources are available?

Information about the health risks of smoking is also available from:

Office on Smoking and Health (OSH)
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Mail Stop K-50, 4770 Buford Highway, NE.
Atlanta, GA 30341-3724
1-800-CDC-1311 (1-800-232-1311)
770-488-5705
Fax: 770-488-5939
FAX Information Service: 770-332-2552
Web site: <http://www.cdc.gov/tobacco>
E-mail: ccdinfo@cdc.gov

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Sources of National Cancer Institute Information

Cancer Information Service

Toll-free: 1-800-4-CANCER (1-800-422-6237)
TTY (for deaf and hard of hearing callers): 1-800-332-8615

NCI Online

Internet

Use <http://www.cancer.gov> to reach NCI's Web site.

CancerMail Service

To obtain a contents list, send e-mail to cancermail@icicc.nci.nih.gov with the word "help" in the body of the message.

CancerFax® fax on demand service

Dial 301-402-5874 and listen to recorded instructions.

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